

REMARKS

By the foregoing amendment, claim 18 has been canceled without prejudice or disclaimer of the subject matter recited therein. Further, claim 1 has been amended to further clarify applicants' invention. Support for the amendment can be found in originally filed claim 18. No new matter has been added.

Rejections Under 35 U.S.C. § 102

Claims 1-6 and 8-19 have been rejected under 35 U.S.C. § 102 as allegedly being anticipated by Lehn et al. (EP 0321353). Applicants respectfully traverse this rejection.

The Office Action alleges that Lehn et al. teaches, *inter alia*, the use of cryptate conjugated oligonucleotides in detection assays. The Office Action further alleges that the claimed reduced fluorescence quenching of the medium would be inherent to the process of Lehn et al. Applicants respectfully disagree.

Lehn et al. discloses rare-earth metal cryptate-oligonucleotide conjugates (Experiment D, on page 20 of Lehn et al., describes the formation of a DNA-cryptate conjugate).

To the contrary, the present invention relates to a process for reducing a fluorescence quenching caused by a measuring medium, in a fluorescence assay for an analyte using at least one fluorescent label, comprising introducing a fluorescent conjugate comprising an oligonucleotide bonded to a rare-earth metal cryptate into the measuring medium, thereby reducing the fluorescence quenching caused by the measuring medium, wherein the fluorescent conjugate is bonded covalently to one member of a pair of molecules that specifically bind to one another (i.e., antibody/antigen or streptavidin/biotin). This is exemplified in examples 6 and 7, which describe the use of a rare-earth metal cryptate-oligonucleotide conjugate to label an antibody or streptavidin.

Lehn et al. does not describe a cryptate-oligonucleotide conjugate that is covalently linked to a member of a binding pair of molecules as presently claimed (e.g., cryptate-oligonucleotide-protein; cryptate-oligonucleotide-antibody; or cryptate-oligonucleotide1-oligonucleotide2); rather Lehn et al. discloses cryptate-oligonucleotide conjugates themselves used as labels, and neither discloses nor suggests that an additional binding molecule be bonded thereto. Therefore, this reference is not anticipatory.

As for the inherency allegation, the Office Action states that the instant specification and claims describe the cryptate molecules of Lehn et al. and that the reduced quenching would naturally result from the teachings of Lehn et al. As discussed above, Lehn et al. is not an anticipatory reference because it fails to teach each element of the claimed invention. Further, the cited reference does not form a basis for inherent anticipation.

Inherency cannot be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. *In re Oelrich*, 212 U.S.P.Q. 323 (CCPA 1981). To support an anticipation rejection based on inherency, the examiner must provide factual and technical grounds establishing that the inherent feature naturally flows from the teachings of the prior art. *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int. 1990). In other words, it must be established that upon reading the disclosure (Lehn et al.), the skilled worker would invariably have been led to the claimed invention or the claimed invention must be invariably accomplished by following the prior art. *Electro Medical Systems v. Cooper Life Science*, 32 U.S.P.Q.2d 1017 (Fed. Cir. 1994). Evidence of such has neither been presented nor alleged in the Office Action.

There is no teaching or suggestion in Lehn et al. that a cryptate-oligonucleotide covalently bound to another molecule would produce an improved effect over a cryptate-oligonucleotide alone.

Therefore, because Lehn et al. does not teach each and every element of the claimed invention, this reference cannot, and indeed does not, anticipate (or inherently anticipate) the claimed invention. Accordingly, applicants request withdrawal of this rejection.

Rejections Under 35 U.S.C. § 103

Claim 7 has been rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Lehn et al. (EP 0321353) in view of Urdea et al. (U.S. Patent No. 5,124,246). Applicants respectfully traverse this rejection.

The deficiencies of Lehn et al. have been discussed above. The teachings of Urdea et al., which discloses 25-mer hybridization probes, do not cure the deficiencies of Lehn et al. Thus, the combination of these two references does not disclose or suggest the claimed invention, and a *prima facie* case of obviousness has not been established.

Accordingly, applicants request withdrawal of this rejection.

Appl. Serial No.: 09/936,563
Attorney Docket No.: LOM-24
Reply Dated August 27, 2003
Reply to Office Action of March 27, 2003

In view of the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order. Such action is earnestly solicited.

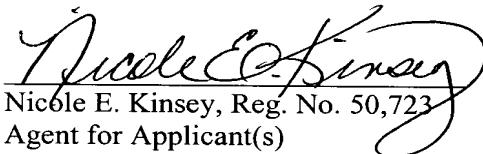
In the event that there are any questions relating to this application, it would be appreciated if the Examiner would telephone the undersigned attorney or agent concerning such questions so that prosecution of this application may be expedited.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



Anthony J. Zelano, Reg. No. 27,969
Attorney for Applicant(s)



Nicole E. Kinsey, Reg. No. 50,723
Agent for Applicant(s)

MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Arlington Courthouse Plaza 1, Suite 1400
2200 Clarendon Boulevard
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

Date: August 27, 2003

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Services as First Class Mail in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on: 8/27/03
Name: Blanca B. J. m/g
Signature: Blanca B. J. m/g